

Note to Paul Dyer
Example on effect of limiting interest deductions

Assume:

- \$100 is invested
- Interest rate $r = 10\%$ p.a
- The investor's personal tax rate $m = 40\%$
- Capital gain on property = 3% p.a.
- After-tax interest rate = $r(1-m) = 6\%$ p.a.

For the marginal investment, if capital gains are 3% , annual rental must be 5% (\$5).

For equity financed investment:

	\$
Rental	5
Capital gains	3
Tax	(2)
After-tax benefit	6

This gives the same after tax return that could be obtained from putting money in the bank.

On the surface there appears to be a problem with debt financed investment.

If borrow to invest:

	\$
Rental	5
Capital gains	3
Interest expense	(10)
Tax saving	2
After-tax benefit	0

Break even investment

Tax loss leads to reduction and, therefore, tax liability of \$2 which just balances the difference between \$8 of benefits and \$10 of cost.

Apparent problem - there is a tax subsidy when borrow to invest and only breakeven.

But the same investment is also marginal for equity investors.

With restrictions on interest deductions

If there are interest restrictions, say only half of is interest deductible, this implies a higher return is needed to make it attractive to borrow to invest. In the above example, 8% is the after-tax interest cost, so a rental return of 8.33% would be necessary for an investment to be marginal, equivalent to a pre-tax return of 11.33% (given a 3% capital gain).

The rental rate would need to go up for people to be willing to borrow to invest. But if the rental is greater than \$5, then it is an infra-marginal investment for equity investors. In equilibrium, the rental return is likely to be close to 5%. Limiting interest deductions is unlikely to do much in the longer run to the level of rental housing.

The restrictions on interest deductions would make it unattractive for people to borrow to invest. As mentioned in our earlier note, there could be considerable structuring. An example could be borrowing to buy shares or units in companies and unit trusts that invest in rental housing rather than borrowing to invest directly.

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G. Leggett
M. Bengé